UNDERGROUND STORAGE TANK REMOVAL REPORT

CARQUINEZ BRIDGE MAINTENANCE STATION SOLANO COUNTY, CALIFORNIA



GEOCON

GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS PREPARED FOR

CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OAKLAND, CALIFORNIA

TASK ORDER NO. 04-43A0006-75 GEOCON PROJECT NO. S8190-06-11

MARCH 1999



GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS



Project No. S8190-06-11 March 29, 1999

California Department of Transportation District 4 - Maintenance Post Office Box 23660 Oakland, California 94623-0660

Attention:

Mr. Manual Miranda

Subject:

CARQUINEZ BRIDGE MAINTENANCE STATION

NORTHERN TERMINUS OF CARQUINEZ BRIDGE-INTERSTATE 80

SOLANO COUNTY, CALIFORNIA

CONTRACT NO. 43A0006

TASK ORDER NO. 04-43A0006-75

UNDERGROUND STORAGE TANK REMOVAL REPORT

Dear Mr. Miranda:

In accordance with Caltrans Contract No. 43A0006 and Task Order No. 04-43A0006-75, Geocon Environmental Consultants, Inc. (Geocon) has performed underground storage tank (UST) removal services at the above-referenced project site. This report summarizes the services performed including the removal of one 50-gallon gasoline UST.

If there are any questions concerning the contents of this report, or if Geocon may be of further service, please contact the undersigned at your convenience.

cott T. Waite

enior Staff Engineer

Very truly yours,

GEOCON ENVIRONMENTAL CONSULTANTS, INC.

John E. Juhrend, PE, C

Project Manager

STW:JEJ:dw

(2) Addressee

(1) California Department of Transportation

Attn: Mr. Carlos Lopez

(1) Solano County Department of Environmental Management

No. 46681 Exp. 6/30/99

Attn: Mr. Mike Rees

TABLE OF CONTENTS

1.0	INTRODUCTION 1.1 Site Location and Existing Improvements	1
	1.1 Site Location and Existing Improvements	1 1
2.0	SCOPE OF SERVICES	2
	2.1 Pre-Field Activities2.2 UST Removal Activities	
3.0	UST REMOVAL OPERATIONS	3
4.0	ANALYTICAL RESULTS	5
5.0	SUMMARY OF FINDINGS	6
Figu	ure 1, Vicinity Map ure 2, Site Plan ure 3, UST Removal Soil Sample Locations	
Tab	le 1 - Summary of UST Removal Soil Analytical Data	
App	pendix A – Regulatory Permits and Correspondence pendix B – Rinseate, Tank, and Soil Disposal Documentation pendix C - Laboratory Reports and Chain-of-Custody Documentation	

UNDERGROUND STORAGE TANK REMOVAL REPORT

1.0 INTRODUCTION

This report presents the results of the removal of one 50-gallon steel gasoline UST performed by Geocon Environmental Consultants, Inc. (Geocon) under Caltrans Contract No. 43A0006 and Task Order (TO) No. 04-43A0006-75.

1.1 Site Location and Existing Improvements

The project site consists of the Caltrans Carquinez Bridge Maintenance Station located at the northern terminus of the Carquinez Bridge adjacent to westbound Interstate 80 (I-80), Vallejo, California. The approximate site location is depicted on the attached Vicinity Map, Figure 1.

The Carquinez Bridge facility is used by Caltrans to store and service bridge painting equipment and road and highway maintenance vehicles. The 50-gallon gasoline UST was formerly utilized by Caltrans for fueling a generator used to power two air compressors for bridge painting activities. Geocon has recently completed the installation of a new 120-gallon Hoover aboveground storage tank (AST) at the site. The locations of the former fuel UST and new replacement AST are depicted on the attached Site Plan, Figure 2.

2.0 SCOPE OF SERVICES

Outlined below is a summary of the scope of services performed by Geocon pursuant to Task Order No. 04-43A0006-75.

<u>2.1</u> Pre-Field Activities

- A pre-work site meeting was conducted on November 20, 1998 with representatives of Caltrans and Geocon to review the Task Order and project work areas.
- Obtained a UST removal permit dated December 2, 1998 from the Solano County Department of Environmental Management (SCDEM). A copy of the SCDEM permit is presented in Appendix A.
- Prepared a *Health and Safety Plan* dated December 14, 1998 to provide guidelines on the use of personal protective equipment, monitoring equipment, and the health and safety procedures to be implemented during the tank removal activities.
- Prepared a Workplan dated December 15, 1998 to outline the requested scope of services and UST removal, soil sampling and analytical testing protocols.
- Provided written notification to the Bay Area Air Quality Management District (BAAQMD) prior to tank removal activities at the site. A copy of the BAAQMD notification response is presented in Appendix A.
- Notified the Vallejo Fire Department (VFD) three days prior to the UST excavation.
- Contacted Underground Service Alert on December 1, 1998 (USA Ticket No. 318339) to advise local subscribing utility companies of the proposed site excavation work.

2.2 UST Removal Activities

- Removed one 50-gallon gasoline UST, vent and product piping on December 16, 1998 in accordance with SCDEM permit requirements.
- Performed soil sampling and analysis in accordance with SCDEM requirements.
- Performed UST excavation backfill and soil compaction.

3.0 UST REMOVAL OPERATIONS

The tank removal activities commenced with the removal of residual gasoline product from the steel UST with the use of a pneumatic double diaphragm vacuum pump. The gasoline product was placed in a 55-gallon drum for subsequent disposal. The tanks were further rinsed prior to asphalt concrete demolition and excavation. The rinseate was placed in a 55-gallon drum for subsequent disposal. Approximately 40-gallons of residual product and rinseate water was transported under bill of lading No. 2759 to the Alviso Oil facility located in Alviso, California on January 5, 1999. A copy of the bill of lading is presented in Appendix B.

The asphalt concrete and backfill materials overlying the UST steel product pipeline, venting and fill pipes were removed on December 16, 1998. Soil generated during the tank excavation activities was stockpiled onsite.

After the gasoline UST was triple rinsed it was purged of remaining flammable vapors using 20 pounds of dry ice before removal. After achieving a lower explosive limit (LEL) of 2% and oxygen level of 1.2% for the gasoline tank, the tank was removed on December 16, 1998 under the observation of Mr. Steve Tyler with Caltrans and Mr. Mike Rees with SCDEM. The gasoline steel tank was noted to have four pinholes in the bottom. On December 16, 1998 the UST was transported by Ecology Control Industries under hazardous waste manifest Nos. 98454692 Erickson Inc., located in Richmond, California. A copy of the manifest is presented in Appendix B.

Soil samples were collected subsequent to the tank removal operations under the direction of Mr. Mike Rees and Mr. Steve Tyler at the following locations:

- One soil sample S-1 was collected at a depth of 5.25 feet below ground surface from the 50-gallon gasoline UST excavation.
- One composite soil sample (SP-1A-1D) was collected from the soil stockpile.

The approximate soil sample locations are depicted on Figure 3. The soil samples were obtained using pre-cleaned 6-inch long sample tubes. The soil samples were subsequently sealed or capped, labeled, and placed in an ice chest containing blue ice, and transported to Advanced Technologies Laboratories (ATL), a California certified laboratory, using standard chain-of-custody documentation.

The tank excavation was subsequently backfilled with permission from SCDEM and Caltrans personnel. The excavation was backfilled with imported 3/4-inch gravel. Asphalt was placed to match surrounding grade and compacted with a vibratory compactor.

The stockpiled soil was placed in eight drums and transported under non-hazardous waste manifest by Ecologix Strategic Services Co., Ltd to TPS Technologies facility located in Richmond California. A copy of the non-hazardous waste manifest is presented in Appendix B.

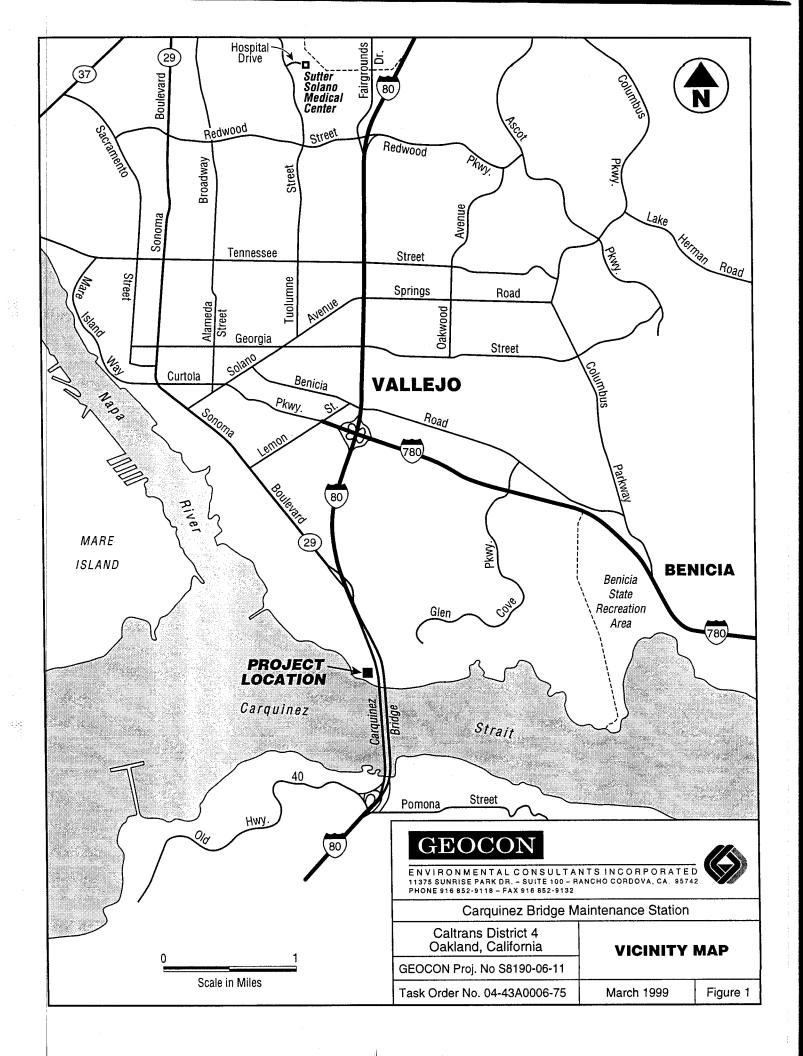
4.0 ANALYTICAL RESULTS

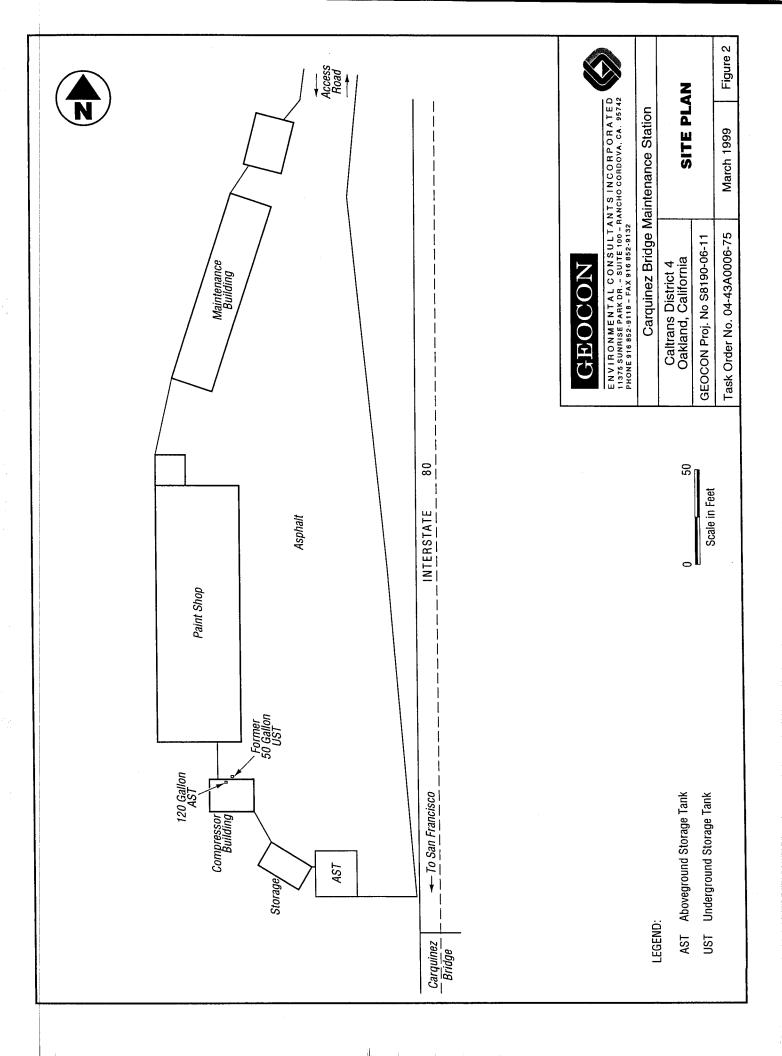
The UST removal soil sample and soil stockpile samples were transported via overnight delivery to ATL under expedited 48-hour turn-around-time. In accordance with the SCDEM requirements, the soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) using Environmental Protection Agency (EPA) Test Method 8015 modified, benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Test Method 8020 fuel oxygenate compounds (FOCs) using EPA Test Method 8260 and total lead using EPA Test Method 6010.

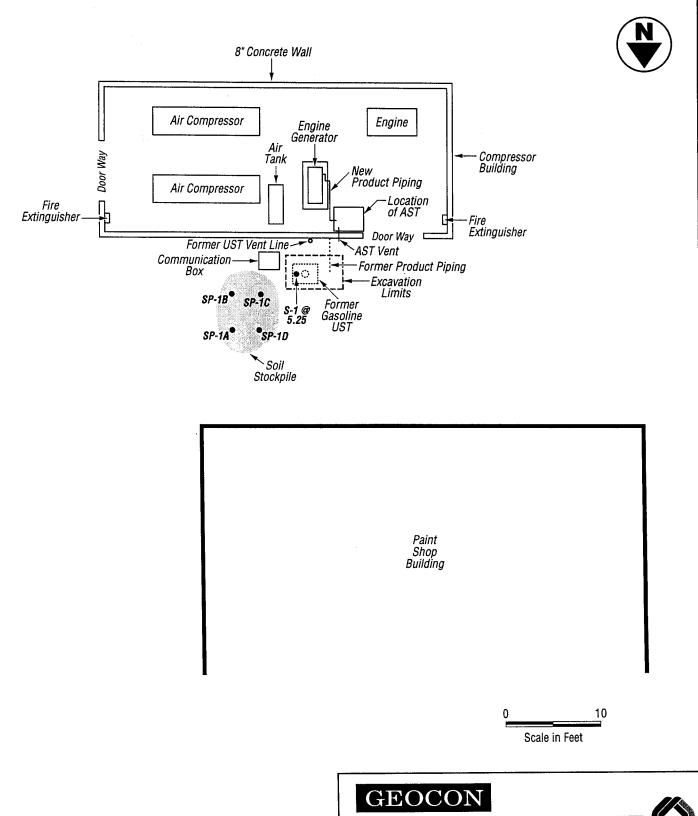
TPHg was detected in both the excavation and stockpile soil samples at concentrations of 1,270 milligrams per kilogram (mg/kg) and 57 mg/kg, respectively. BTEX was detected in excavation sample S-1 at concentrations ranging from 12,400 micrograms per milligram (ug/kg) to 189,000 μ g/kg. FOCs were not detected in sample S-1 with the exception of methyl tert-butyl ether (MTBE) at a concentration of 12,400 μ g/kg. BTEX and FOCs were not detected in the stockpile sample SP-1A-1D with the exception of ethylbenzene and total xylenes at concentrations of 23 and 2,810 μ g/kg, respectively and tert-butanol at a concentration of 4,070 μ g/kg. Total lead was detected in both the excavation and stockpile samples at concentrations ranging from 42 mg/kg to 64 mg/kg, respectively. A summary of the soil analytical results are presented in Table 1. The laboratory reports and chain-of-custody documentation is presented in Appendix C.

5.0 SUMMARY OF FINDINGS

The results of the laboratory tests indicate the presence of gasoline range petroleum hydrocarbon soil impacts. Additional site assessment will be required to determine the extent of the former gasoline UST related site impacts It is requested that the SCDEM provide a written opinion regarding the status of the subject UST site.







LEGEND:

SP-1A ◆ Approximate Soil Sample Location

ENVIRONMENTAL CONSULTANTS INCORPORATED 11375 SUNRISE PARK DR. – SUITE 100 – RANCHO CORDOVA, CA. 95742 PHONE 916 852-9118 – FAX 916 852-9132



Carquinez Bridge Maintenance Station

Caltrans District 4 Oakland, California GEOCON Proj. No S8190-06-11 **UST REMOVAL SOIL SAMPLE LOCATIONS**

Task Order No. 04-43A0006-75

March 1999

Figure 3

Project No. S8190-06-11 March 29, 1999

Page 1 of 1

SUMMARY OF UST REMOVAL SOIL ANALYTICAL DATA CARQUINEZ BRIDGE MAINTENANCE STATION SOLANO COUNTY, CALIFORNIA TABLE 1

SAMPLE ID. SAMPLE DEPTH SAMPLE LOCATION TPHg (mg/kg) BENZENE TOLUENE BENZENE TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL T					とならつつ						
SAMPLE SAMPLE TPHg BENZENE TOLUENE BENZENE XYLENES FOCS DATE DEPTH LOCATION (mg/kg) (μg/kg)								ETHVI.	TOTAL		TOTAL
SAMPLE SAMPLE TPHg BENZENE TOLUENE BENZENE XYLENES FOCs DATE DEPTH LOCATION (mg/kg) (μg/kg)								-711117	101		
DATE DEPTH LOCATION (mg/kg) (μg/kg) (41 41 41 41	SAMPLE	SAMPLE	SAMPLE	ТРН	BENZENE	TOLUENE	BENZENE	XYLENES	FOCs	LEAD
12/16/98 5.25 GAS UST 1,270 <500 42,800 13,000 189,000 12/16/98 SOIL STOCKPILE 57 <5 23 2,810	SAMPLE I.D.	DATE	DEPTH (feet)	LOCATION	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(μg/kg)	(µg/kg)	(mg/kg)
12/16/98 5.25 GAS UST 1,270 <500 42,800 13,000 189,000 12/16/98 SOIL STOCKPILE S7 <5 23 2,810			(Icci)								
12/16/98 5.25 GAS UST 1,270 <5000 42,800 15,000 105,00					!		900	12 000	160 000	12 400 MTRE	42
12/16/98 SOIL STOCKPILE 57 C.S. SOIL STOC	S-1	12/16/98	5.25	GAS UST	1,270	00C>	42,800	13,000	2.810	4 070 TRA	19
1B, SP-1C, SP-1D	SP-1A, SP-	12/16/98	;	SOIL STOCKPILE	27	7	7	3	10,1	100	•
SP-1D	1B, SP-1C,										
	SP-1D										

Notes:

TPHg = Total petroleum hydrocarbons as gasoline FOCs = Fuel oxygenate compounds by EPA Test Method 8260 MTBE = Methyl tert-butyl ether

TBA = Tert-butanol

mg/kg = Milligrams per kilogram $\mu g/kg = Micrograms$ per kilogram < = Less than laboratory test method detection limits ... = Data not applicable

APPENDIX A



Department of Environmental Management

601 TEXAS STREET FAIRFIELD, CALIFORNIA ● 94533-6301

Environmental Health Division (707) 421-6765

Clifford K. Covey, REHS, CHMM Program Manager

December 2, 1998

Mr. Scott Waite GeoCon 11375 Sunrise Park Dr., Suite 100 Rancho Cordova, CA 95742

Re: Permit to Remove 1 x 50 Gallon Gasoline Underground Storage Tank (UST) @Carquinez Maintenance Station, Caltrans Carquinez Bridge on I-80, Vallejo; File #11000

Dear Mr. Waite:

Your application to remove <u>one</u> underground storage tank has been approved subject to the following conditions as required by Chapter 13.5 of the Solano County Code and Title 23, Div. 3, Chapter 16, Article 7, California Code of Regulations:

- 1. The Vallejo Fire Department shall be notified of the pending removal operation and shall oversee the implementation of the Uniform Fire Code dealing specifically with matters of safety, purging of harmful vapors contained in the tanks and removal of the tanks from the above location.
- 2. Verification of the integrity of the existing tank system shall take place by inspection of the removed tanks after the outer surface has been scraped clean and inspection of the tank excavation by an Environmental Health Specialist.
- 3. Soil samples and/or water samples shall be required on the day of tank removal. Sampling shall be conducted in accordance with the Tri- Regional requirements. Results of the laboratory analysis shall be submitted for review by this Division within 30 days after sampling. The analyses listed in enclosure #1 shall be required on the soil and/or groundwater taken from the tank excavation.
- 4. With the exception of soils being accepted by a permitted Treatment Storage or Disposal (TSD) facility, no soils shall leave the site until the laboratory results of the soil samples required by enclosure # 1 have been examined by personnel of this office and a suitable receptacle for the soils has been established.

- 5. Contaminated backfill materials shall not be returned to the excavation pit, but shall be held on site with a barrier of cement, asphalt, visqueen, or other material deemed suitable by this office. The backfill materials shall be separated from native soils. A soil remediation plan shall be submitted if on-site treatment is proposed. Proof of legal disposal of contaminated soil shall be submitted within 30 days of disposal.
 - 6. All materials removed from the tanks shall be containerized and treated as hazardous waste according to Division 20, Chapter 6.5 of the California Health and Safety Code.
 - 7. All tanks shall be treated as hazardous waste and shall be directly transported to a California Department of Health Services licensed TSD facility by a licensed waste hauler utilizing the Uniform Hazardous Waste Manifest. The manifest number shall be provided to this office.
 - 8. Technical reports, documents, and plans which contain engineering, geology, and/or geophysical information must be prepared by, or under the direction of, properly licensed individuals in the State of California, pursuant to Sections 6735, 7835, and 7835.1 of the Business and Professions Code. Responsibility for the technical information is indicated by signature and/or stamp of the seal of the responsible licensed individual(s). More than one signature and/or seal may be required where more than one professional specialty is included within the technical report, document, or plan submitted.
 - 9. A detailed site safety plan shall be available on site at all times.
- 10. If during the removal process, a release of contaminate is found or threatened, warning signs shall be posted at the site. Proposition 65 pursuant to Section 25249.6 of the Calif Health & Safety Code, requires that no person in the course of doing business shall knowingly and intentionally expose any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning.
- 11. The contractor shall maintain an appropriate contractor's license and hazardous materials certificate from the State Contractor's License Board.
- 12. **Forty-eight hours notice** shall be given to this office prior to initiating work at the site. An appointed time for the removal of the tanks shall be set. If that set time cannot be met by the Contractor, cancellation of that appointment shall be made at least 4 hours before the removal.
- 13. You must notify the Bay Area Air Quality Management District of your removal plans.

14. If you have not complied with the conditions of this permit (i.e. removal of tanks) by December 22, 1998, you shall have complied with the following:

- A. Empty tanks and submit copy of manifest demonstrating legal disposal of contents.
- B. Except for required venting, seal all fill and access locations and piping using locking caps or concrete plugs.
- C. Disconnect power to all pumps associated with the use of the underground storage tanks.
- D. Inspect underground storage tanks quarterly to verify locks and seals are still in place and no liquids have been added to the tanks.
- E. In accordance with LG-149, submit a written plan to assess soil and groundwater contamination on site using borings and/or monitoring wells.
- F. Request an inspector from our office verify (through a field inspection) that items A through D have been completed by December 22, 1998. You shall request this inspection at least 2 working days in advance.

The work listed in items A through E shall be completed by <u>December 22, 1998</u>. If this work is not completed by this date, and the underground storage tanks have not been removed in accordance with this permit, we may forward your case to the District Attorney's Office. This permit to remove is valid for one year from the date of this letter.

Should you have any questions, please contact this office at (707) 421-6765.

Sincerely,

Bradley S. Nicolet

Senior Environmental Health Specialist

cc.

- 1. Vallejo Fire Department
- 2. Bay Area Air Quality Management District, 939 Ellis Street San Francisco, CA. 94109 Attn: Jack Bean
- 3. Vallejo Building Department

T:\TEMPLATE\ENVHLTH\HAZMAT\TANKREMV.E2 (November 22, 1996)

Enclosure # 1

ANALYSES/PROCEDURES REQUIRED FOR UNDERGROUND STORAGE TANK CLOSURES

WASTE OIL TANK

WATER
5030/3550/8015M 3510/8015M
5520 C&F/413.2(EPA)
8260
8260
6010
8080
8270

FUEL, GASOLINE OR DIESEL TANK

SOIL	WATER
TPHg or TPHd 5030/8020/8015M	5030/3510/8015M
BTEX/MTBE & ADDITIVES 8260	8260
Total Lead 6010	6010

Notes:

Samples are normally taken 2 feet into native soil on the basis of:

- one sample under the tank fill end for tanks under 1,000 gallons
- two samples, one under each end of a tank up to 10,000 gallons
 three samples, one under the ends and one under the center of tanks over 10,000 gallons.

If groundwater is encountered, the same number of samples shall be taken 6 " above the soil/groundwater interface and one sample taken of the groundwater. The excavation may be purged of water prior to obtaining the water sample. (Sampling from the saturated zone is recommended as a source of additional useful data).

Excavated materials in the spoils pile shall be sampled as a 4:1 composite sample each 50 cubic yards or as a discrete sample each 20 cubic yards.

Product lines shall be sampled every 20 linear feet beginning at the entry point to the tank excavation and measured backward to the pump or fill with both ends sampled as a minimum.

Additional samples may be required if observed conditions warrant further data.



Department of

Environmental Management
601 TEXAS STREET
FAIRFIELD, CALIFORNIA • 94533-6301 707-421-6765

File	#	

APPLICATION TO CLOSE AN UNDERGROUND STORAGE TANK FOR HAZARDOUS SUBSTANCES

	REMOVE	TEMPORARY CLOSURE	_ CLOSE I	N PLACE
Applica	int: 6000N - Sco	TT WAITE		
Addres	s: 1/375 SUNPISE A	APR DA SUITE 100		
-		SITE LOCATION		
	Name: CARQUWEZ M			
[⊤] acility		funct Bridge (on STAT		
-	y Owner: <u>PALTRANS</u>		Phone #: _	570-286-4495
Tank(s)	Owner: SANE		Phone #: _	809000 2
3usines	ss Owner: SAME		Phone #: _	· 2.7+311 2
Comper	sation Laws of California.	which this permit is issued, I shall not employ a		y manner so as to become subject to the Workers'
NOTIC		Certificate of Exemption, you should become su		kers' Compensation provisions of the Labor Code,
hereby permit.(IFORNIA INDUSTRIAL SAFETY PERMIT re feet in depth into which a person is required to , CCR)Initial		ATION made in connection with work authorized by this
As own permit t	er-builder, I will not perform or employ a such work from the divisionInitia	nyone to do work which would require a permit	from the Divisio	on of Industrial Safety, unless such person has a
Division	n of Industrial Safety Permit No			
Loertifi		e that the above information is true and accurate		

CONTRACTOR/LICENSES

Contractor's Business Name: 650con							
Contact Person: Scott WAITE Phone #: 9/6-8-52-9//8							
Mailing Address: //37	5 Survise	Park DR.	Surte 100				
Consultant: Sime			Phone #:				
State Contractor's Licen	se # <u>7/60</u>	20	Type:	4			
TANK DATA							
Number of tanks to be: Removed Closed in Place							
Temporarily Closed	Remaining a	after proposed c	losures				
Note: Submit State A Fo	orm for the site a	and State B Forr	n for each tank	•			
Tank A Tank B Tank C Tank D Tank E							
Capacity	50 94/	Tank b	7 di IK C	Tank D	Tank E		
Contents	6450LNE						
Steel or FRP	Steel 40 years						
Age	40 years						
	/						
PLOT PLAN							
Attach a plot plan which shows the following: - Plot plan scale and north arrow - Location of tank(s) and associated piping - Location of sewer, electrical, water, & gas lines - Location of buildings and property lines - Location of water wells and groundwater monitoring wells							
SITE SAFETY PLAN							
Attach a site safety plan that addresses, as a minimum, the following: - Anticipated physical hazards, overhead, equipment etc. - Fire/explosion prevention measures (meter required) - Excavation entry procedures, sloping and shoring - Protective clothing and chemical hazards - Confined space entry - Emergency medical procedures, evacuation							
CLOSURE-BASIC REQUIREMENTS							
By what method will all residual vapors, liquids, solids, or sludge be removed?							
LIQUID-Pumped, vapor-dryice							
What licensed hazardous waste hauler will transport hazardous waste and or underground tanks?							
What laboratory, licens	ed by the Califo	ornia Departmen La bora for z	t of Health Serv	rices, will perforr	n analysis?		
Havanced 7 Who is the sample colle	ector?	pert kim be	111 na 5	OF Waite	2		
What is the destination	for residual haz	ardous wastes?	NORTH V.	HLEY OIL			
Environmental Protection	n Agency ID. No	o, under which	tank will be man	nifested? (41)	982029209		

What is the destination of the ground tank(s)? <u>ECI ELICLSON</u> The required number of soil samples per tank shall be: <1,000 gallons - 1; >1,000 - 9999 gallons -2; >10,000 gallons - 3 Also required to be sampled: Groundwater - 1 (if present); Piping every 20 linear feet; Excavated soil every 50 cubic yards (composite 4:1) or every 20 cubic yards (discrete) **TEMPORARY CLOSURE** Where will power be disconnected? ____ What method will be used to seal access locations? Frequency of inspection to verify tank(s) empty and seals in place? **CLOSURE IN PLACE** Basis for requesting Closure in Place:____ Will piping be removed or emptied and capped? What inert solid will be used to fill the tank? Is the proposed boring location at the centerline or at the tank ends? Depth to groundwater? ____ What is the verified groundwater gradient? ______ What is the location of the monitoring well? Note: Additional samples may be required subject to mitigating conditions encountered at the time of removal, or closure in place e.g. groundwater, condition of tank(s) and piping, contamination, etc. Samples taken during soil boring or monitoring well installation shall be at every 5 feet, to and including groundwater, and as lithology changes. You must notify the Fire Department and Air Quality District having jurisdiction. Submit findings of all soils and/or groundwater sampling and analysis done pursuant to this closure to determine extent of any contamination within 30 days of removal. All Clean-up Proposals must be submitted in report form to the Environmental Health Services Division before any actual work is begun. The Division shall be provided with at least a 48 hour notice prior to the closure of the tank(s). Fees must be paid with the permit application. I certify that I have read this application and state that the above information is correct. I agree to

comply with all applicable county ordinances, State and Federal laws relating to underground storage tank closure, and hereby authorize representatives of this county to enter upon the above-mentioned property for inspections purposes.

Applicant's Signature

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A



COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONLY 1 NEW PERMIT 3 RENEWAL PERMIT	5 CHANGE OF INFORMATION 7 PERMANENTLY CLOSED. SITE					
ONE ITEM 2 INTERIM PERMIT 4 AMENDED PERMIT 6 TEMPORARY SITE CLOSURE						
1. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)						
DBA OR FACILITY NAME NAME OF OPERATOR NAME OF OPERATOR						
ADDRESS	NEAREST CROSS STREET PARCEL # (OPTIONAL)					
CITY NAME	STATE ZIP CODE SITE PHONE # WITH AREA CODE					
10 INDICATE	LOCAL-AGENCY COUNTY-AGENCY* STATE-AGENCY* FEDERAL-AGENCY*					
* If owner of UST is a public agency, complete the following: name of supervisor of division, section or office which of						
1 GAS STATION 2 DISTRIBUTOR 3 FARM 4 PROCESSOR 5 OTHER	PESERVATION OR TRUST LANDS					
EMERGENCY CONTACT PERSON (PRIMARY)	EMERGENCY CONTACT PERSON (SECONDARY) - optional					
DAYS: NAME (LAST, FIRST) PHONE # WITH AREA CODE DAYS: NAME (LAST, FIRST) PHONE # WITH AREA CODE						
NIGHTS: NAME (LAST, FIRST) PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST) PHONE # WITH AREA CODE					
II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)						
NAME CARE OF ADDRESS INFORMATION						
MAILING OR STREET ADDRESS Dox to indicate						
46 0 36 8 3 3 4 6 0 CITY NAME	CORPORATION PARTNERSHIP COUNTY-AGENCY FEDERAL-AGENCY					
018644 B 28647 B 28647 B 28647						
III. TANK OWNER INFORMATION - (MUST BE COMPLETED)						
NAME OF OWNER	CARE OF ADDRESS INFORMATION					
MAILING OR STREET ADDRESS Dox to indicate						
CITY NAME	STATE ZIP CODE PHONE # WITH AREA CODE					
IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.						
TY (TK) HQ 44						
V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) - IDENTIFY THE METHOD(S) USED						
▶ box to indicate ■ 1 SELF-INSURED						
VI. LEGAL NOTIFICATION AND BILLING ADDRESS Legal notification and billing will be sent to the tank owner unless box I or II is checked.						
CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING:						
THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT						
TANK OWNER'S NAME (PRINTED & SIGNATURE) TANK	OWNER'S TITLE DATE MONTH/DAY/YEAR					
LOCAL AGENCY USE ONLY						
COUNTY # JURISDICTION	# FACILITY #					
LOCATION CODE - OPTIONAL CENSUS TRACT # - OPTIONAL	SUPVISOR - DISTRICT CODE - OPTIONAL					

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.

OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY 1 NEW PERMIT 3 RENEWAL PERMIT 5 CHANGE OF INFORMATION 7 PERMANENTLY CLOSED ON SITE ONE ITEM 2 INTERIM PERMIT 4 AMENDED PERMIT 6 TEMPORARY TANK CLOSURE 8 TANK REMOVED					
DBA OR FACILITY NAME WHERE TANK IS INSTALLED:					
I, TANK DESCRIPTION COMPLETE ALL ITEMS - SPECIFY IF UNKNOWN					
A. OWNER'S TANK I. D. # B. MANUFACTURED BY:					
C. DATE INSTALLED (MO/DAY/YEAR) D. TANK CAPACITY IN GALLONS:					
II. TANK CONTENTS IF A-1 IS MARKED, COMPLETE ITEM C.					
A 1 MOTOR VEHICLE FUEL 4 OIL B. C. 1a REGULAR UNLEADED 3 DIESEL 6 AVIATION GAS 2 PETROLEUM 80 EMPTY 1 PRODUCT 1b PREMIUM UNLEADED 4 GASAHOL 7 METHANOL 1c MIDGRADE UNLEADED 5 JET FUEL 8 M85 3 CHEMICAL PRODUCT 95 UNKNOWN 2 WASTE 2 LEADED 99 OTHER (DESCRIBE IN ITEM D. BELOW)					
D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED C. A. S. #:					
III. TANK CONSTRUCTION MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E					
A. TYPE OF SYSTEM 1 DOUBLE WALL 3 SINGLE WALL WITH EXTERIOR LINER 5 INTERNAL BLADDER SYSTEM 95 UNKNOWN 99 OTHER B. TANK 1 BARE STEEL 2 STAINLESS STEEL 3 FIBERGLASS 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC					
MATERIAL 5 CONCRETE 6 POLYVINYL CHLORIDE 7 ALUMINUM 8 100% METHANOL COMPATIBLE W/FRP (Primary Tank) 9 BRONZE 10 GALVANIZED STEEL 95 UNKNOWN 99 OTHER					
C. INTERIOR					
D. EXTERIOR 1 POLYETHYLENE WRAP 2 COATING 3 VINYL WRAP 4 FIBERGLASS REINFORCED PLASTIC CORROSION 5 CATHODIC PROTECTION 91 NONE 95 UNKNOWN 99 OTHER E. SPILL AND OVERFILL, etc. DROP TUBE YES NO STRIKER PLATE YES NO DISPENSER CONTAINMENT YES NO					
IV. PIPING INFORMATION CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE					
A. SYSTEM TYPE A U 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A U 4 FLEXIBLE PIPING A U 99 OTHER					
B. CONSTRUCTION A U 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A U 95 UNKNOWN A U 99 OTHER					
C. MATERIAL AND A U 1 BARE STEEL A U 2 STAINLESS STEEL A U 3 POLYVINYL CHLORIDE (PVC) A U 4 FIBERGLASS PIPE CORROSION A U 5 ALUMINUM A U 6 CONCRETE A U 7 STEEL W/ COATING A U 8 100% METHANOL COMPATIBLE W/FRP PROTECTION A U 9 GALVANIZED STEEL A U 10 CATHODIC PROTECTION A U 95 UNKNOWN A U 99 OTHER					
D. LEAK DETECTION 1 MECHANICAL LINE LEAK 2 LINE TIGHTNESS 3 CONTINUOUS INTERSTITIAL 4 ELECTRONIC LINE 5 AUTOMN 99 OTHER 99 OTHER V. TANK LEAK DETECTION					
1 VISUAL CHECK 2 MANUAL INVENTORY 3 VADOZE 4 AUTOMATIC TANK 5 GROUND WATER 6 ANNUAL TANK TESTING MONITORING 99 OTHER					
VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)					
1. ESTIMATED DATE LAST USED (MO/DAY/YR) 2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING GALLONS INERT MATERIAL? 3. WAS TANK FILLED WITH YES NO SUBSTANCE REMAINING GALLONS					
THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT					
TANK OWNER'S NAME (PRINTED & SIGNATURE) DATE					
LOCAL AGENCY USE ONLY THE STATE LD. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW					
COUNTY # JURISDICTION # FACILITY # TANK # STATE I.D.#					
PERMIT NUMBER PERMIT APPROVED BY/DATE PERMIT EXPIRATION DATE					

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

SOLANO COUNTY, DEPARTMENT OF ENVIRONMENTAL MANAGEMENT 601 TEXAS STREET, FAIRFIELD, 707-421-6770

UNDERGROUND STORAGE TANK CLOSURE INSPECTION REPORT

REMOVAL	CLOSE IN PLACE	TEMP. CLOSURE	FILE #	
Date 12/16/98	Arrive 0830	_ Depart	_ Overtime: Y_N_Hours	
Facility Name ACTRANS -	ARALINEZ Address	CARRIANUAR 2 KRI	etc 1). The west of	2/2-
Contractor/Sampler	1	No. Tanks Clo	sed No. Tanks Rem	aining
Tank size and contents a)_				
LBS of ICE / LEL / O2 levels a)	20 12271129b)	//c)	//d)/_	
Hauler/Destination	<u>/</u>		Trailer Permit #	
Manifest Number(s) 952/54	1692			
DIAGRAM (NOT TO SCALE) Dispensers 2 Buildings and S	MANDATORY MAP ENT	RIES: Location of; Tankes, Locations and Depths	s) Fill Pipes Produ : # Soil # H2O # Spoils # Pipe).
	<u> </u>			
	The second secon			
1-80	23	THINK		
1 1 2	(Car)	So sac.		
. : ; t		•		
		-714	10 HOLES NOTED - SO	Fam. 1/16
			worthred separch	s . एक्टिक्स
. ;	1		8 6 D	
			NATURE AT COURT	י מיזאוי יצ
		~	Example 4:1 Space	5.
			pino 15" ropper	NIC JON
		••• .	121NOTHER MORTHUNICE	zy celiture
	·	•	Ţ.	
i. Removal	III. Tem	porary Closure	IV. Closure in Pla	<u>C8</u>
Yes No Cmts 1. () () Valid Closure Perm 2. () () Tank Cleaned 3. () () Destination of Rins 4. () () () Holes in Tank(s)/Pi 6. () () Soil Type () 7. () () Soil Staining/Odor II. Soil/Water Sampling 8. () () Number of Sampling 9. () () Location of Sampling 10. () () Soil Tests Request	14 () () { } Tan leate	k Contents Removed nessed Sticking ks or Seals on Fill Caps duct Piping Disconnected at Pipe Open ver Disconnected	Yes No Cmts 0.()()()() Valid Closure Per 1.()()() Tank(s) Rinsed 2.()()() Soil Sampling 3.()()() Proper Sturry Fill 4.()()() Vents in Place 5.()()() Indication of Rel 6.()()() Notice in Deed 7.()()() Piping Removed	8486
11. (17) (1) Samples to Certif 12. (1) (1) Sealed/Evidence		ATE 12/16/98		



BAY AREA! TOUALITY MANAGEMENT DISTRICT

939 ELLIS STREET SAN FRANCISCO, CALIFORNIA 94109 (415) 771-6000

RE PLATION 8, RULE 40 NOTIFICATION FORM

Check √ ☑ Removal or Replacement of Tanks
☐ Excavation of Contaminated Soil

SITE INFOI						
Site Address CARQUNEZ BRIDGE (ALTRAN) (ON STATE ROUTE SO)						
	Zip 94570					
Owner Name (AZTRAN S						
Owner Name (AU/RAID	ATTO / Compareson River Diale					
Specific location of project NORTH SIDE OF GENER	Contaminated Soil Excavation					
Tank Removal						
Scheduled startup date 12/7/98	Scheduled Startup Date \(\frac{12}{7} \) \(\frac{9}{8} \) Stockpiles will be covered? Yes \(\frac{10}{12} \) No \(\frac{10}{12} \)					
Vapors removed by: Water wash	Indicate below the method used to comply with					
	Regulation 8, Rule 40, Section 402.4:					
☑ Vapor freeing (CO²) ☐ Ventilation	Check (√) 8-40-301 □ 8-40-302 □ (permit required)					
Indicate below if an A/C was obtained for tank replacement:	A/C or P/O #					
Yes No/ If yes, A/C or P/O #	A/C = Authority to Construct P/O = Permit to Operate					
The sale mublin agency have you notified (e.g., Fire District, Hazardous Materials Department, City or County)?						
Agency Department Environment Contact Down EV Banks Phone # (707) 421-6765						
PLACME CONTRACTOR INFORMATION						
BAAOMD# CONTRACTOR II						
Name Gescon	Contact Scott Waite					
Address 1/375 Sunrisc Park Dr. Stille	Phone (9/4) 852-9/18					
City, State, Zip Rancho Cordeva CA 95742						
CONSULTANT INFORMATION (If applicable)						
ZUNSULIAM ELI-						
Name	Contact					
Address	Phone ()					
City, State, Zip						
FOR OFFICE USE ONLY						
Date Received Fax:	Date Postmarked:					
Inspector No.:	Date: By					
Update: Contact Name	Date: By					
	Date: By					
Update: Contact Name	See reverse for instructions					

APPENDIX B

CARQUINS BURGE TOPH PLATA UNLETED LAHT, GYSGO HOLY 80 SHIP TO , Ė REDIFORM CARBONLESS SPEEDISET 75737/7P737 POLYPAK (50 SETS)

INVOICE

5408 946 3694



ERICKSON Tank Processing JOB #: 975005

)	EKICKO		ERTIFICATION			
**	******	****** PART 1	- To be con	mpleted by the	Customer **	******	******
CUS	TOMER: CEOC	on		TOR: C. Hranj	-District 4	State Waste Code	s: 512
LOC.	RANS YARO. ATION: At Ca. Veto.	WEST BOUND rguine 3 Brid	ge era i.d.	#: <u>caoqs aos</u> est #: <u>9845</u>	<u>19209</u> 14697	EPA Waste Code Non	
TRA	NSPORTER: 1 R			TANK 3	TANK 4	TANK 5	TANK 6
		TANK 1 25178	TANK 2	IMM	IMIK 4	THUK 5	111111111111111111111111111111111111111
_	NK #:						**************************************
. 1	PACITY:	100					
DIA	AMETER:	24"					
LE	NGTH:	<u> 31 ''</u>			······································		
ST	EEL/GLASS:	Stee!					
LA	ST CONTAINED:	U.G. LG = Leaded Gas, Specify the material	Last Containe	d if other than abo	ove.	Oil, FO = Fuel	Oil
		ERICKS LAND DIS	SON, INC. TA POSAL REST	NK PROCESSIN RICTION NOTIF	IG FACILITY FICATION FOR	М	
Nor Nor	Pursuant to 40 CF n-RCRA hazardous v Pursuant to CCR	on this manifest is no such, it is not regulated R 268.7 I am notifying waste and not currently 22 66268.7 I am notifying our waste (66268.29(go these wastes have been	ed under 40 Cl g Erickson, Inc y subject to EP fying Erickson y), and an orga	that the material A Land Disposal Inc. that the ma	I described by the Restrictions.	e above manifest in the manifest is the manife	s a nonwastewater, a metal containing 66268.29 (k)). The
is of the rec ago in	omplete and accurate information provide tifying the discrepan see to pay the cost of effect at the time of r	and representative of the to the best of my known dabove. In the event cy(ies) between the tap reparation, transport eccipt of the tank(s). It is preparation to the ground of the groun	wledge. The tanks that the tanks nk(s) and the tation and disposarther, I will	do not correspond form. In the even	d to the form, I at that the tank(s	will pay any and contain excessive al according to the	all costs incurred in solids or liquids, I schedule of charges
	UTHORIZED REPR	ESENTATIVE/	7 -		DAT	E: 12/16/98)
		Tital 1			TITL	E: Area Sup	erintiadent
	RINT NAME:	war ige	<u>/ </u>				
90	O For assistance	in completing this fo		ntact Karen Ruffir		163.	
		ONSITE TIM	Æ TRUCK	1 <u>8:30</u>	TO		

TRUCK 2 _____TO

se print or type. Form	050-0039 (Expires 9-30-99) designed for use on elite (12-	pitch, swriter.		Manifest Docum		e ó.	Sac	t of Toxic Substa cramento, Califo
UNIFO WAS	RM HAZARDOUS STE MANIFEST	CIAIDI918121			ent No.	2. Page 1		n the shaded are ed by Federal lav
3. Generator's I	Name and Mailing Address	Transportation - L	215/7/01/VI	11700	Asse	Manufest Documen	ak Kolobasi A	
P.O. Box	23660 C# 04623 -06	660			e Sidis	estation		4.0
4. Generator's 5. Transporter 1	Company Name	4495 Attn.	Steve Ty	le-		<u></u>	يد قصف ال	
!	RUCKLINES				1	i Funsperter is iP# porter s Phone	S	
7. Transporter 2	-	8. US	D 9 8 2 4 EPA ID Number	343/V	58.63	in all and a little of the second of the sec		1783-2
					公约等的数据	oorles's Phone		i.
ERICKSON		s 10. US	S EPA ID Number		G. Stole	facility a ID Sign (BO) BL (B		
255 PARR I		~ *		~ ~ ~ ~ ~ ~		ly's Pliones		- المستون المس
		pping Name, Hazard Class, and	D0094 ID Number)	12. C	ontainers	13. Total	14. Unit	
	EMPTY STO			No.	Туре	Quantity	ž.	Waste Nambe
	RA hazardous			001	TP	00064		PA/Others
b.								idle:
Ř							E	PA/Other
° .								iale#
R d.				11				PA/Other)
a.							ž.	late •
Additional Des	riptions for Malegials Listed				-		P.	PA/Other Edition
JE 20 / 200		ETANK(S)#25/	77		0.	ling Codes for Wa		
		TANKISI HAVEB						
15. Special Hand	EPER 1000 GAP (ling Instructions and Addition	al Information Contract Positive clothing wi	, 43 A 0006	Task Order	No.	19-43 A 00	96-75	
24 Hour E	ropriate protec mergency Tele	tive clotning Wi	nen nandiir -{9/6} <i>508-</i> /9/	ng. SITE	LOCA 13rid	TION: Cal	trans Ca Lenance S	tation
24 Hour E	mergency Con	phone Number tact: B. J. Kimber	1-GECCON	Norther Intersta	te 80	minus of Solano Co	Cargaine ounty	ERG
16. GENERATOR	'S CERTIFICATION: hereby	declare that the contents of this ects in proper condition for tran	consignment are fully	and accurately desc	rihed above	by proper chinging	a aama aad ara c	لحمامهم المحاكمها
If I am a lar	ge quantity generator, I certi	y that I have a program in pla	ice to reduce the volu	me and toxicity of	waste gener	ated to the degree	I have determine	ed to be econom
and the envi	nd that I have selected the pronuent; OR, if I am a small the and that I can afford.	racticable method of treatment, quantity generator, I have made	storage, or disposal de a good faith effect	to minimize my wo	to me which aste generati	minimizes the pre ion and select the l	esent and future t best waste manag	hreat to human l gement method t
Printed/Typed No		1	rigeature /	7/1			Month	Day 2 / /
	Acknowledgement of Receip			7				
Bos Son			Signature				Month	Day
18. Transporter :	 Acknowledgement of Receiptime 		Signature				Month	Day
R 19. Discrepancy	Indication Space							
[]	·		,					
			···		·			
20. Facility Own Printed/Typed No		of receipt of hazardous material	s covered by this mar Signature	ifest except as note	d in Item 19.		Month	n Day
		1					1	

White:

ECO>Logix

STRATEGIC SERVICES CO., LTD. P.O. BOX 7856 CHICO, CA. 95927 530.342.3020 530.342.6449 FAX 707.746.3113 PAGER

Invoice/Manifest

NON-HAZARDOUS MATERIALS ONLY

#_99-1089

	<i>A</i>	TANT INFORMATION	
BILL TO: CEOLON EN	IV. CONS.	CONTACT: 50077	WAITE
ADDRESS: 11375 SUNR	ISE FARK UR. *R		
CITY/STATE RANCHO CO		FAX #: 916-852	
	70 /4Z		
SITE NAME: CALTRAN	S SITE & GENERAL	GENERATOR: ACT	RANS
ADDRESS: CARQUINE	EZ BRIDGE	ADDRESS:	
CITY/STATE: VALUETO	A	CITY/STATE:	
	•	,	
GENERATOR/CONS	SULTANT/AGENT CERT	IFIES THIS WASTE IS 100% N	ON-HAZARDOUS
BY:	GENERATOR/COI	NSULTANT/AGENT	DATE: 3-1-99
SIGNATURE		LE ONE)	
<u>.</u>			
001/01/01/01/05 500:00		ACILITY INFORMATION	
COMPANY NAME: <u>ECOLOGI</u>	X STRATEGIC SERVICE	<u> S CO., LTD</u> PHONE #: <u>707.7</u>	748.4485 OR 530.342.3020
MAILING ADDRESS: P.	O. BOX 7856 CHICO, CA	i. 95927 FAX #: 707.748.	4486 OR 530.342.6449
OTHER:	TRUC	CK I.D.# PHONE	
ECOLO	OGIX DOES NOT ASSUI	ME TITLE TO WASTE SHIPME	NTS
DRIVER		# of drums, etc8	•
RECEIVED BY:	CLASTI) DATE	: <u>3-2-97</u> soil <u>8</u> water	ROTHER
	_		
FOR SHIPMENT TO:	MCKITTRICK WA		S TECHNOLOGIES RECYCLING LANE
	MCKITTRICK, CA		CHMOND, CA. 94801
	805.762.7366		0.235.8778
OTHER:			
CASALL	NB UST S	PROFILE #_	
		11101122 #	
DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
TOUC SOU	D Day us	0	フィムー
	8 DRUMS	<u>\$7</u>	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
17776 JUIC	/	e - /	
STLC-LEAD		\$ \ SO	· \$
STLC-LEAD		\$ <u>\$</u> \$ <u>TO</u> TAL THIS INVO	\$ 50, = \$ ICE: \$ 2/000
PAYMENT TERMS ARE NET 30			8.0.

IMPORTANT-PAY ONLY TO GATEWAY ACCEPTANCE CO. BOX 829, ALAMO, CA 94507

This account and the related goods and or services have been assigned to and are payable only to Gateway Acceptance Co. All payments and or the return or rejection of any goods and or services must be made directly to Gateway Acceptance Co. (925) 820-6833

FOR PROPER CREDIT - PLEASE list supplier name and invoices being paid with remittance.

APPENDIX C

January 13, 1999

ELAP No.: 1838

Geocon Environmental 11375 Sunrise Park Drive, Suite 100 Rancho Cordova, CA 95742

ATTN:

Mr. Scott Waite

Client's Project:

Carquinez Bridge Maint. Station, S8190-06-11

Lab No.:

31637-001/006

Gentlemen:

Enclosed are the results for sample(s) received by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company. Please feel free to call me at (562) 989 - 4045 if I can be of further assistance to your company.

Sincerely,

Cheryl De Los Reyes

Technical Operations Manager

CDR/ra

Enclosures

This cover letter is an integral part of this analytical report.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purpose without authorization is prohibited.

Client:

Geocon Environmental Consultants

Attn:

Mr. Scott Waite

Client's Project:

Carquinez Bridge Maint Station, S8190-06-11

Date Received:

12/17/98 12/16/98

Date Sampled: Date Digested:

12/21/98

Digestion Method: EPA 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed		Matrix, Units	MDL	: DLR	Analyst
31637-001	S-1	EPA 6010 (Lead)	12/21/98	42	Soil, mg/kg	5.0	5.0	LP
31637-006	Composite	EPA 6010 (Lead)	12/21/98	61	Soil, mg/kg	5.0	5.0	LP
31637-006Dup	Composite	EPA 6010 (Lead)	12/21/98	64	Soil, mg/kg	5.0	5.0	LP

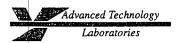
MDL	=	Method Detection Limit
ND	=	Not Detected (Below DLR)

DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By:	(iv)	Date: //x/co
	Cheryl de los Reyes	·

Technical Operations Manager

The cover letter is an integral part of this analytical report.



Spike Becovery And RPD Summary Repoor

EPA 6010 (Lead) ICP81221-1 LP/OL Data File: Analyst: Method:

8355-1

QA File:

 Date Analyzed:
 12/21/98

 Date Digested:
 12/21/98

See below Sample ID:

Soil Matrix:

	MDL	വ										-				
	RPD Limit	20														
	RPD	4														
	% REC	68-106														
	%MSD REC	70														
CP981221-1	%MS REC	73	,													
QAQC Batch No: ICP981221-1	MSD RESULT	235														
	MS RESULT	245														
	SPK ADDED	250					***									
	% Dev	2														
	SPL DUP	64														
	SPL CONC	91														
	METH BLANK	QN														
	% Rec															
	LCS Res	_														
	LCS Conc	5.0														
-	UNITS	mg/kg														
<u>:</u>	SAMPLE ID		1													

David J. Kern Inorganics Supervisor Approved by:



Client:

Geocon Environmental Consultants

Attn:

Mr. Scott Waite

Client's Project: Carquinez Bridge Maint. Station, S8190-06-11

Date Received:

12/17/98

Matrix: Units:

Soil μg/kg

EPA Method 8260 (Oxygenated Compounds)

La	b No.:	Metho	d Blank	31637-00)1*	31637-0	06*	LCS		
Client Sample	e I.D.:			S-1		Compo	site			
Date San	apled:			12/16/98		12/16/9	8			
QC Ba	tch #:	Q98V0	OCS269	Q98VO	CS269	Q98VO	CS269	Q98VO	CS269	
Date Ana	lyzed:	12/21/9	98	12/21/98		12/21/9	8	12/21/9	8	
Analyst In				EM		EM		EM		
Dilution F			1			5		1		
ANALYTE	MDL	DLR	Results	DLR	Results	DLR	Results	Limits	Results	
Ethanol	2000	2000	ND	200000	ND	10000	ND	21-175	NS	
Tert-Butanol	100	100	ND	10000	ND	500		21-175	NS	
Methyl tert-Butyl Ether	5	5	ND	500	12400			21-175		
Di-isopropyl Ether	5	5	ND	500	ND	25		21-175		
Ethyl tert-Butyl Ether	5	5	ND	500	ND	25		21-175	NS	
Tert-Amyl methyl Ether	5	5	ND	500	ND	25	ND	21-175	NS	

MDL = Method Detection Limit

ND = Not Detected (Below DLR). DLR = MDL X Dilution Factor

NA NS = Not Analyzed

= Not Spiked

= Dilution required due to presence of non target hydrocarbons in the sample.

Reviewed/Approved By:	W.
	Lee Ingvaldson
	Department Supervisor

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report - Solitug/kg/

Method

: C:\HPCHEM\1\METHODS\PVS1111.M (RTE Integrator) : VOC 8240/8260B Advanced Technology Laboratory

Title

Last Update : Thu Dec 24 07:08:47 1998

Response via : Initial Calibration

Non-Spiked Sample: 31630-04.D

Spike

Sample

Spike

Duplicate Sample

File ID : PL1221A.D

PMD1221A.D

Sample : MS 31630-04

MSD 31630-04

Acq Time: 21 Dec 98 11:43 am

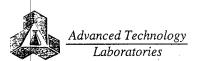
22 Dec 98 8:35 am

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC RPD	Limits % Rec
1,1-dichloroethene	0.0	100	95	92	95	92	3	20	58-156
benzene		100	103	106	103	106	3	12	72-134
trichloroethene		100	109	107	109	107	2	16	55-145
toluene		100	98	111	97	110	12	16	73-127
chlorobenzene		100	103	107	103	107	4	11	80-119

QCBATCH#P98VOCS269

Reviewed/Approved By:_

Lee Inqualdson Department Supervisor _Date:



Geocon Environmental Consultants Mr. Scott Waite Client: Attn: Carquinez Bridge Maint. Station, S8190-06-11 12/17/98 12/23/98 Soil

Client's Project: Date Received: Date Amended: Matrix: Date Amended:

01/13/99

						*	ATTITUD ONIENT (Pasalina)/EDA 9078	JULEAL CO.		(CD)	CUS						
								NA TARREST OF							_	_	Γ
	1	ab No.:	Lab No.: Method Blank		31637-001	3]	31637-006	rcs									
	Client Sample I.D.:	nle LD.:			S-1	C	Composite										
	Date Sa	Date Sampled:		1	12/16/98	1.	12/16/98										
	0C1	Batch #:	OC Batch #: 1988G20S448		1988G20S448		1988G20S448	I988G20S448	90								
	Date An	nalyzed:	Date Analyzed: 12/21/98		12/21/98	11.	12/21/98	12/21/98			1						
	Analyst	Analyst Initials: RL	RL	I	RL	RL	L	RL									
	Dilution	Dilution Factor:	1		100		1	-					_				
Analyte	MODE	MDL Units	DIR	Results DLR	DLR Res	NI S	Results DLR Results Limits "6Rec	Limits	16Rec				\blacksquare		_		
TPH (Gas)	-	mg/kg	1.0	ON	100	1270	5.0 57*	57* 38-146	96				-				
Renzene	v	ug/kg	5.0	£ S	200	ND	5.0 ND	ND 41-145	94						-		
Toluene		uø/kg	5.0	£	200	42800	5.0 ND	ND 41-145	112						$\frac{1}{1}$		
Ethylbenzene	-	ug/kg	5.0	ND	200	13000	5.0 23	23 41-145	89			-	+				
X vlenes (total)	S	ug/kg	5.0	ND	500 18	189000	5.0 2810	2810 41-145	121	_			-				

* Dilution factor of 5

		_			_		_	_	-					
	I ob No													
	LAD INO.								• ••••				-	
Clie	Client Sample I.D.:										-			
	Date Sampled:						-				-			
	QC Batch #:													
	Date Analyzed:										-			
7	Analyst Initials:													
	Dilution Factor:													
Analyte	MDL Units													
TPH (Gas)	1 mg/kg						-			-				
Benzene	5 µg/kg								1	-				
Toluene	5 µg/kg													
Ethylbenzene	5 µg/kg									-				,
Xylenės (total)	5 µg/kg					_								
MDL = Method Detection Limit	Limit			DLR = M	DLR = MDL X Dilution Factor NA = Not Analyzed	on Factor								
ND = Not Detected. (Below DLR)	ow DLR)	É		17 - 171	or canalyze						٠	-		

MDL = Method Detection Limit ND = Not Detected. (Below DLR)

Reviewed/Approved By:

Advanced Technology
Laboratories

Lee Ingvaldson, Department Supervisor

The cover letter is an integral part of this analytical report.

: C:\HPCHEM\1\METHODS\CARBON.M (RTE Integrator) Method

: 8015GAS/ 8020(BTXE) Title

Last Update : Mon Oct 05 12:01:21 1998 Response via : Initial Calibration

Non-Spiked Sample: IB1221A.D

Spike

Spike Duplicate Sample Sample

IMD1221A.D File ID : IMS1221A.D

Sample : BLANK-3ppm MS Gas (+BTEX) BLANK-3ppm MSD Gas (+BTEX)

22 Dec 1998 6:56 am Acq Time: 22 Dec 1998 6:31 am

Compound	Sample Conc	Spike Added	Spike Res		Spike %Rec		RPD	~	Limits % Rec
Gasoline (mg/kg) Benzene #2 (ug/kg) Toluene #2 (ug/kg)	ND ND ND	3 31 183	3 21 163	23	94 68 88	h .	6	15	41-151 42-132 42-132

OC BATCH #:1988G20S448

Reviewed and Approved by:

Lee Inqualdson Organics Supervisor Date:

CHAIN OF CUS FOUR RECORD

Pg t of '

	•			•	FOR LABOHALORY US	OHI COL	ONE I		
Advanced Technology	Technology				Method of Transport	ansport		Sample Condition Upon Receipt	\bar{\bar{\bar{\bar{\bar{\bar{\bar{
Labor	Laboratories	Batch #:	# D.O.		Courier) <i>`</i> E	I. CHILLED] Z	
1510 E. 33rd Street		P.O.#:			UPS		2. HEADSPACE (VOA) Y	Y ☐ N ☐ 5.# OF SPLS MATCH COC	oc Kpin⊓ oc Kpin⊓
Signal Hill, CA 90807 (562) 080-4045 • FAX (562) 989-4040	(62) 989-4040	Logged By:	Date:	CID Time OILS	FED. EXP. ATL	<u> </u>	3. CONTAINER INTACT Y	YØ N□ 6. PRESERVED	Y O N
COS) ACTION TIME (SOS)		SACRAMENTO	Address:	ss: 11375 Sunrise Park Drive. Suite 100	k Drive. Suite 100			TEL: (916) 852-9118	118
Client. GEOCOIN FINAL			2	Rancho Cordova	150	State CA	\ Zip Code 95742	12 FAX:(916) 852-9132	132
Aun: 25/1911 10 60 10	, - 17	# Broject		Sampler:	(Print	- 8000	ed Name) (Signature)	3.16. 1000 100 100 100 100 100 100 100 100 1	: د (
right name (no grown P 45 (Age WYRICH STEP)	VIET 45, 10to	Se IVNULCE SIC		()()()()() me: - : (() () (ed by: (Sig	rinted Name)	Conversion Const	Date; ;) / (;	īme:
Relinquished by: (Styraum and Printed Name)		V. W. P. P. C.	20-10/1-92	((1)	Received by: (Signature and Printed Nafine)	a delivery)		Date: 7 1 ClyTime.	[Me:/) / / /)
Relinquished by: (Signature and Printed Name)	l Name)				Sandy Provided Provided Name		- 1:17 FT TING 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Date:	Time:
Relinquished by: (Signature and Printed Name)	l Name)	Da	Date :	1000	od by. (ogrania and r	Specia	Special Instructions/Comments:	13	3
SHIP TO LAB:	I hereby authorize ATL to performance Mar /Submitter:	I hereby authorize ATL to perform the work indicated below: Project More/Submitter:	ated below:	Attn:			Cactrais USPICIOLO		
TEST:			,	Co:				1-0× 41-0> 3	
ATL#:DATE:	Print Name	ame		Address		<u> (</u>	Cempatella som pur	20-16-16-16-16-16-16-16-16-16-16-16-16-16-	7-10
CLIENT I.D.				<u>.</u>	State				
		Signature		City -			///	CIBCI E APPROPRIATE	QA/QC
Unless otherwise	<u>=</u>	posal: ıdard		Circle or Add Color Analysis(es)			8/0	MATRIX	RTNE
will be disposed 45 days	Other Betum To:					20010		///	MW.
after receipt.	* *** **	* \$40 00 EEE BEB HAZABDOI IS SAMPI E DISPOSAL.	I E DISPOSAL.		באנה באני באני	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	310	// /	□ F
	* \$10.00 reg re	ואייט פססטייאדען ע			18.0 18.0 18.0	/ /2	(Y) E	(ダ/ / Container(s)	ا ا د
I LAB USE ONLY:		Sample Description			AGT W	MOT SUPPLY OF SUPPLY SU	30 / SAI / SO / SI / SI	HILL	OTHER
E Lab No.	Sa	Sample I.D.	Date Time	001/00/00/00/00/00/00/00/00/00/00/00/00/	\$108		%	% TAT # 1ype	HEMAHKS
311147- PM	100	1	Coffed Marzo		×	×	X	() 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
6(1)	C.O."	C0-10	3210				×	1 1 16 6	ر ان
		\$0-14					文	2 m/ 1. 1	17
700		7.03	020	7 CO	×	×	メ	(1 4 PA C	
200	11-0-3		11 1975				X	I i MA	<i>₹</i>
7777									
					, s				
					1	"// CT			
	-	Overnight	Emergency	3	_ = 	Urgent	E= Routine	17	- 1
TAT starts 8 a.m. following day if samples received after 5 p.m.			Next work	itor D-Dint	T Tall	Workdays G=Glass	P=Plastic M=Metal	H=Hcl N=HNO3 Z=Zn(AC)2 O=N8	S=H2SO, C=4 C IOH T=Na2S2O3
משווחופס ופרפועסר מוייי		Container Types: T=Tube	V=VOA	L=Liter F=Pint J=Jar	3	G=Crass	1	-/	